

WHAT IS CLAIMED IS:

1. A method for producing a solid-state imaging device comprising: a
base of an insulating material having a frame form in planar shape with an
5 aperture formed in an inner region thereof and having a substantially
uniform thickness; a wiring provided on one surface of the base and
extending toward the outside from the peripheral portion of the aperture; and
an imaging element mounted on the surface of the base provided with the
wiring so that a light-receptive region of the element faces the aperture,
10 wherein the wiring includes an internal terminal portion at the end portion
on the aperture side and an external terminal portion at the end portion on
the outer peripheral side of the base, and the electrode of the imaging
element and the internal terminal portion are electrically connected, the
method comprising:
15 using a pair of molds for forming cavities for resin-molding a plurality
of the bases and a tape member supporting thin metal plate leads for forming
a plurality of sets of the wirings corresponding to the respective bases, the
mold being provided with a plurality of pins for forming a plurality of
positioning holes in thickness direction of the base;
20 loading the tape member between the pair of molds so that the thin
metal plate leads are positioned in the regions corresponding to the plurality
of bases in the cavities;
filling a sealing resin in the cavities and curing it;
taking a resin molded member, in which the thin metal plate leads
25 are embedded, out of the molds;
removing the tape member from the resin molded member;
dividing the resin molded member into a plurality of pieces each of
which corresponds to the base provided with the wiring; and
mounting the imaging element on a face of the base provided with the
30 wirings.
2. The method for producing a solid-state imaging device according to
claim 1, wherein the resin molded member taken out of the mold is pressed
between a pair of parallel flat molds so as to carry out remedial curing.
3. The method for producing a solid-state imaging device according to
claim 1, wherein

the cavities are formed by using a pair of molds and blocks disposed between the pair of molds for forming an aperture of the base,

after filling a sealing resin in the cavities and curing it, a resin molded member, in which the thin metal plate leads are embedded and the
5 block is held, is taken out of the molds;

the tape member and the block are removed from the resin molded member; and

the resin molded member is divided into a plurality of pieces, each of which corresponds to the base provided with the wiring.

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4. The method for producing a solid-state imaging device according to claim 1, wherein after the resin molded member in which the block is held is taken out of the mold, the resin molded member is pressed between a pair of parallel flat molds under heating condition so as to be subjected to remedial
15 curing.

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5. The method for producing a solid-state imaging device according to claim 3, wherein the block as well as the thin metal plate lead are supported on the tape member, and the tape member is sandwiched between the pair of
20 molds to form the cavities, and the thin metal plate leads are placed in the cavities.

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6. The method for producing a solid-state imaging device according to claim 5, wherein the end face of the block is tilted in such a manner that an angle made by the end face and the bottom face of the block on the side of the tape member is less than 90°.

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7. The method for producing a solid-state imaging device according to claim 1 or 3, wherein when the tape member is removed from the resin molded member, flash of the resin molded member is removed together with the tape member in a state of attachment to the tape member.

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8. The method for producing a solid-state imaging device according to claim 7, wherein the dimensions of the pair of molds, the plurality of pins, the block and the tape member are set so that when the tape member is interposed between the pair of molds, the tip portion of the protrusion of the mold for forming an aperture of the base and at least one of the tip portions of
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the plurality of pins or the block are intruded into the tape member.